**Project:** French Creek Fish Barrier Site

Date: 6/24/2013

Subject: Measurement and Pay Items - Engineers Cost Opinion

Work						
_	Desc.	Unit	Quantity	Tota	l Cost	Notes
						Includes all prep work for transport and movement of personnel,
						equipment, supplies and incidentals to/from the project site.
1	Mobilization/Demobilization	LS	1	\$	17,800	Also includes constructing access road to the site.
						Includes clearing and grubbing work areas and removal of
2	Clearing, Grubbing and Demolition	LS	1	\$	6,200	existing woody debris and rock.
						Includes stream flow diversion, work area dewatering,
3	Water Management	LS	1	\$	19,000	stormwater management and sediment control
						Includes general excavation, backfill, all materials, placing any
						special subgrade materials, formwork, rebar, placing concrete,
						stripping forms, finishing, and berm construction. Assumes
						existing rock onsite is suitable for riprap and placer mining
						stockpiles nearby are useable for berm construction. Also
						assumes larger diameter (6" +) material at stockpiles will have
4	Structure Construction	LS	1	\$		already been screened for other projects mentioned by FWP.
5	Reclamation and Revegetation	LS	1	\$	3,000	Includes grading and vegetation of disturbed areas.
	Construction Subtotal			\$	161,800	
	Construction Contingency			\$	16,200	10% construction cost contingency
	Construction Total			\$	178,000	Total construction cost estimate with 10% contingency.
	Engineering Design and					
	Administration	T&M		\$	5,000	Finalize plans and assist in bidding and awarding project.
						Includes construction surveying, on-site observation, submittal
	Construction Oversight	T&M		\$		reviews and design field adjustments. (10-10hr days)
	Grand Total				198,000	